

Amendments to the Claims:

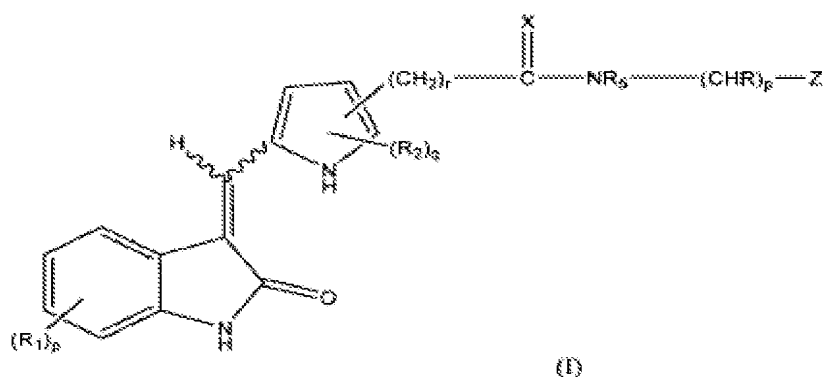
This listing of claims will replace all prior versions and listings of claims in the application:

Listing of Claims:

1-14 (Canceled)

15. (Currently amended) A method of inhibiting phosphorylation of CSF1R (colony stimulating factor 1 receptor) in a patient in need of such inhibition, comprising administering to said patient an inhibitory amount of a compound of

Formula I:



wherein

R is independently H, OH, alkyl, aryl, cycloalkyl, heteroaryl, alkoxy, heterocyclic and amino;

each R_1 is independently selected from the group consisting of alkyl, halo, aryl, alkoxy, haloalkyl, haloalkoxy, cycloalkyl, heteroaryl, heterocyclic, hydroxy, $-C(O)-R_8$, $-NR_9R_{10}$, $-NR_9C(O)-R_{12}$ and $-C(O)NR_9R_{10}$;

each R_2 is independently selected from the group consisting of alkyl, aryl, heteroaryl, $-C(O)-R_8$ and SO_2R'' , where R'' is alkyl, aryl, heteroaryl, NR_9N_{10} or alkoxy;

each R_5 is independently selected from the group consisting of hydrogen, alkyl, aryl, haloalkyl, cycloalkyl, heteroaryl, heterocyclic, hydroxy, $-C(O)-R_8$ and $(CHR)_rR_{11}$;

X is O or S;

p is 0-3;

q is 0-2;

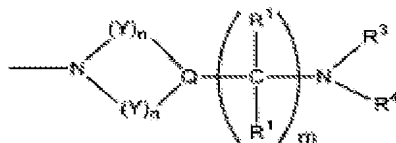
r is 0-3;

R_8 is selected from the group consisting of $-OH$, alkyl, aryl, heteroaryl, alkoxy, cycloalkyl and heterocyclic;

R_9 and R_{10} are independently selected from the group consisting of H, alkyl, aryl, aminoalkyl, heteroaryl, cycloalkyl and heterocyclic, or R_9 and R_{10} together with N may form a ring, where the ring atoms are selected from the group consisting of C, N, O and S;

R_{11} is selected from the group consisting of $-OH$, amino, monosubstituted amino, disubstituted amino, alkyl, aryl, heteroaryl, alkoxy, cycloalkyl and heterocyclic R_{12} is selected from the group consisting of alkyl, aryl, heteroaryl, alkoxy, cycloalkyl and heterocyclic;

Z is OH , O-alkyl, or $-NR_3R_4$, where R_3 and R_4 are independently selected from the group consisting of hydrogen, alkyl, aryl, heteroaryl, cycloalkyl, and heterocyclic, or R_3 and R_4 may combine with N to form a ring where the ring atoms are selected from the group consisting of CH_2 , N, O and S or



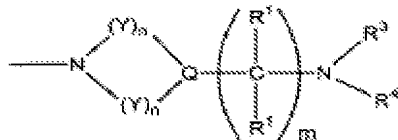
wherein Y is independently CH_2 , O, N or S,

Q is C or N

n is independently 0-4; and

m is 0-3.

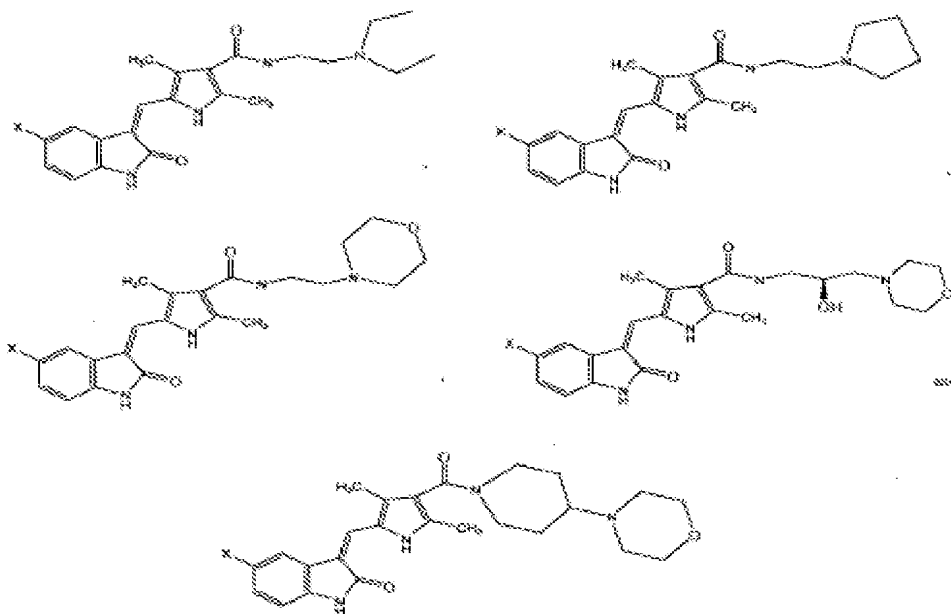
16. (New) The method of claim 15, wherein R_1 is halo and p is 1.
17. (New) The method of claim 16, where Z is $-NR_3R_4$, wherein R_3 and R_4 form a morpholine ring.
18. (New) The method of claim 15, wherein Z is:



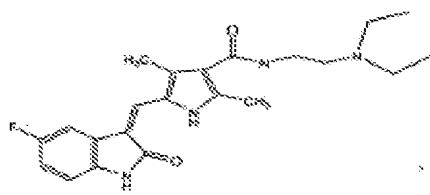
wherein each Y is CH_2 , each n is 2, m is 0 and R_3 and R_4 form a morpholine ring.

19. (New) The method of claim 15, wherein R_2 is methyl, q is 2 and the methyls are bonded at the 3 and 5 positions.
20. (New) The method of claim 15, where in r is 0.
21. (New) The method of claim 20, wherein R_5 is H.
22. (New) The method of claim 20, wherein R_2 is methyl, q is 2 and the methyls are bonded at the 3 and 5 positions.

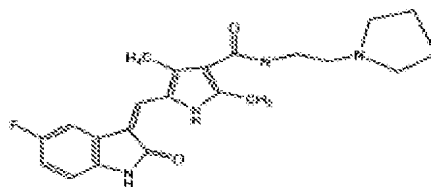
23. (New) The method of claim 15, wherein the compound administered is selected from the group consisting of:



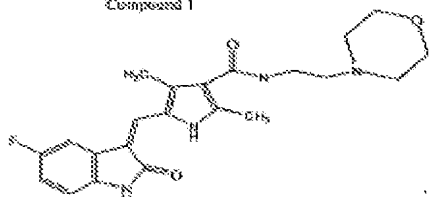
24. (New) The method of claim 15, wherein the compound of Formula I is selected from the group consisting of:



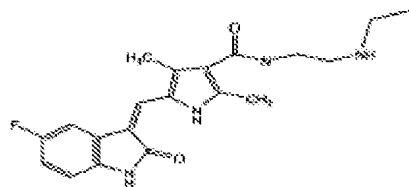
Compound 1



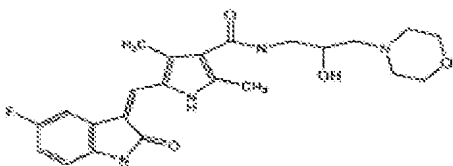
Compound 2



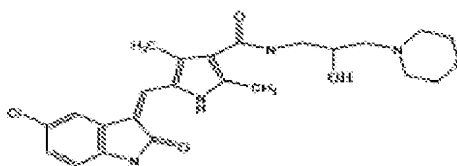
Compound 3



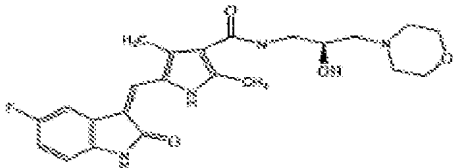
Compound 4



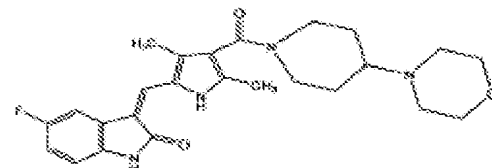
Compound 5



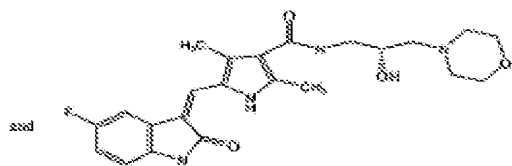
Compound 6



Compound 7

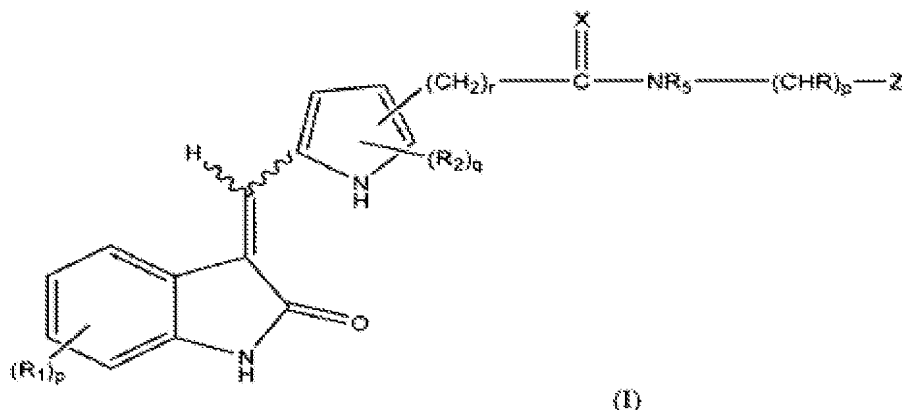


Compound 8



Compound 9

25. (New) A method for treating excessive osteolysis in a patient having cancer that has metastasized to bone, comprising administering to said patient an effective amount of a compound of Formula I:



wherein

R is independently H, OH, alkyl, aryl, cycloalkyl, heteroaryl, alkoxy, heterocyclic and amino;
 each R₁ is independently selected from the group consisting of alkyl, halo, aryl, alkoxy, haloalkyl, haloalkoxy, cycloalkyl, heteroaryl, heterocyclic, hydroxy, -C(O)-R₈, -NR₉R₁₀, -NR₉C(O)-R₁₂ and -C(O)NR₉R₁₀;

each R₂ is independently selected from the group consisting of alkyl, aryl, heteroaryl, -C(O)-R₈ and SO₂R'', where R'' is alkyl, aryl, heteroaryl, NR₉N₁₀ or alkoxy;

each R₅ is independently selected from the group consisting of hydrogen, alkyl, aryl, haloalkyl, cycloalkyl, heteroaryl, heterocyclic, hydroxy, -C(O)-R₈ and (CHR)_rR₁₁;

X is O or S;

p is 0-3;

q is 0-2;

r is 0-3;

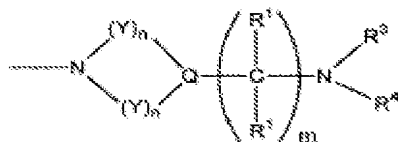
R₈ is selected from the group consisting of -OH, alkyl, aryl, heteroaryl, alkoxy, cycloalkyl and heterocyclic;

R₉ and R₁₀ are independently selected from the group consisting of H, alkyl, aryl, aminoalkyl, heteroaryl, cycloalkyl and heterocyclic, or R₉ and R₁₀ together with N may form a ring, where the ring atoms are selected from the group consisting of C, N, O and S;

R₁₁ is selected from the group consisting of -OH, amino, monosubstituted amino, disubstituted amino, alkyl, aryl, heteroaryl, alkoxy, cycloalkyl and heterocyclic; R₁₂ is selected from the group consisting of alkyl, aryl, heteroaryl, alkoxy, cycloalkyl and heterocyclic;

R_{12} is selected from the group consisting of alkyl, aryl, heteroaryl, alkoxy, cycloalkyl and heterocyclic;

Z is OH, O-alkyl, or $-NR_3R_4$, where R_3 and R_4 are independently selected from the group consisting of hydrogen, alkyl, aryl, heteroaryl, cycloalkyl, and heterocyclic, or R_3 and R_4 may combine with N to form a ring where the ring atoms are selected from the group consisting of CH_2 , N, O and S or



wherein Y is independently CH_2 , O, N or S,

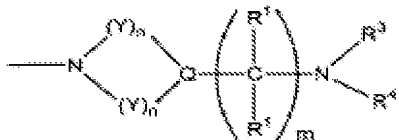
Q is C or N;

n is independently 0-4; and

m is 0-3;

or a salt thereof.

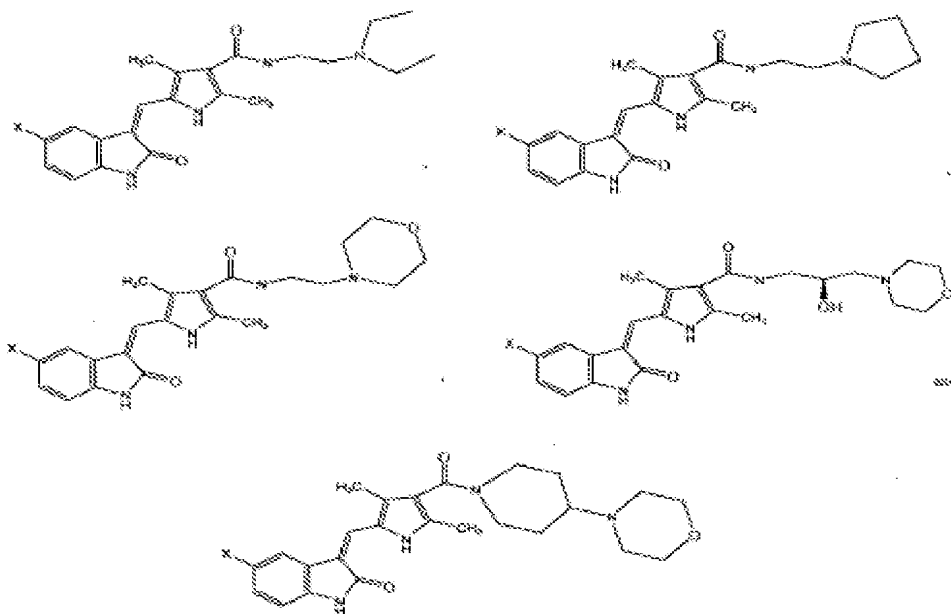
26. (New) The method of claim 25, wherein R_1 is halo and p is 1.
27. (New) The method of claim 26, where Z is $-NR_3R_4$, wherein R_3 and R_4 form a morpholine ring.
28. (New) The method of claim 25, wherein Z is:



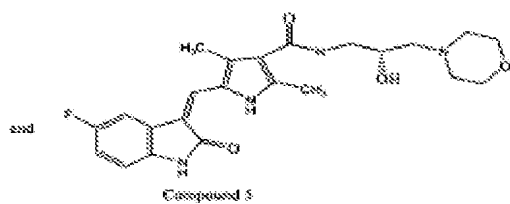
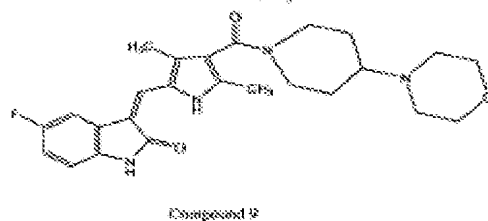
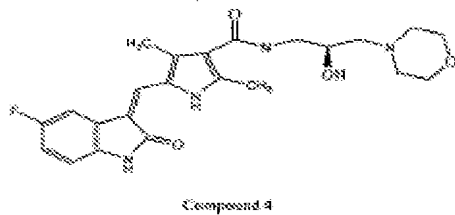
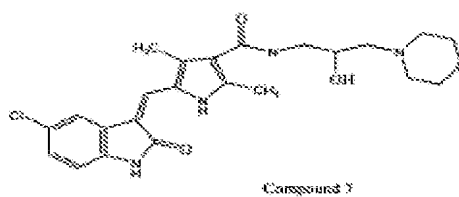
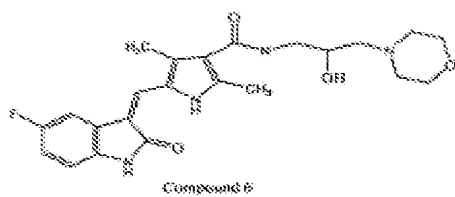
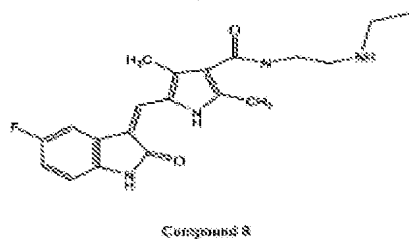
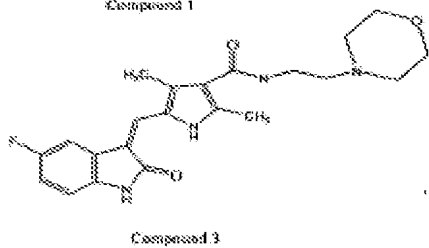
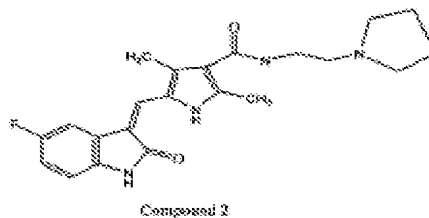
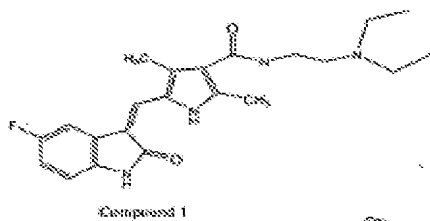
wherein each Y is CH_2 , each n is 2, m is 0 and R_3 and R_4 form a morpholine ring.

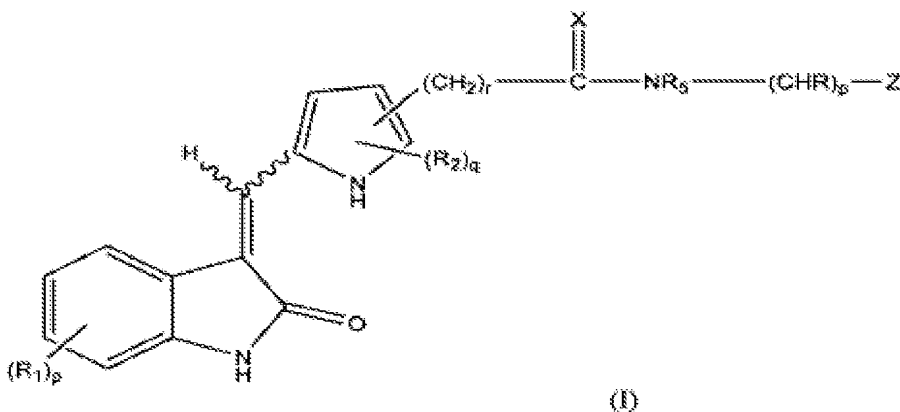
29. (New) The method of claim 25, wherein R_2 is methyl, q is 2 and the methyls are bonded at the 3 and 5 positions.
30. (New) The method of claim 25, where in r is 0.
31. (New) The method of claim 30, wherein R_5 is H.
32. (New) The method of claim 30, wherein R_2 is methyl, q is 2 and the methyls are bonded at the 3 and 5 positions.

33. (New) The method of claim 25, wherein the compound administered is selected from the group consisting of:



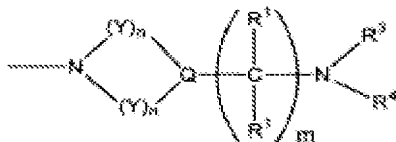
34. (New) The method of claim 25, wherein the compound of Formula I is selected from the group consisting of:





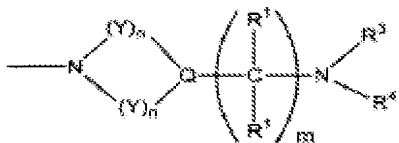
Z is OH, O-alkyl, or $-NR_3R_4$, where R_3 and R_4 are independently selected from the group consisting of hydrogen, alkyl, aryl, heteroaryl, cycloalkyl, and heterocyclic, or R_3 and R_4 may

combine with N to form a ring where the ring atoms are selected from the group consisting of CH₂, N, O and S or



wherein Y is independently CH₂, O, N or S,
 Q is C or N;
 n is independently 0-4; and
 m is 0-3;
 or a salt thereof.

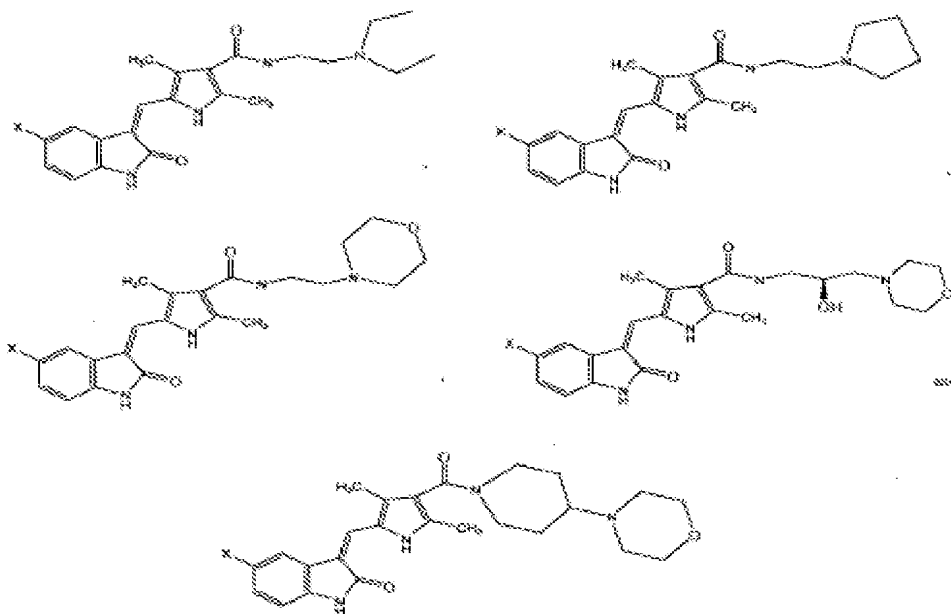
36. (New) The method of claim 35, wherein R₁ is halo and p is 1.
37. (New) The method of claim 36, where Z is -NR₃R₄, wherein R₃ and R₄ form a morpholine ring.
38. (New) The method of claim 35, wherein Z is:



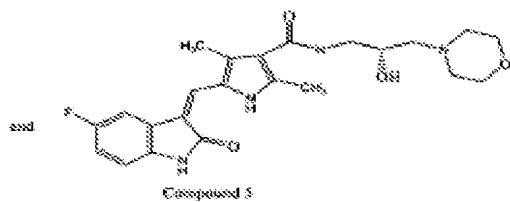
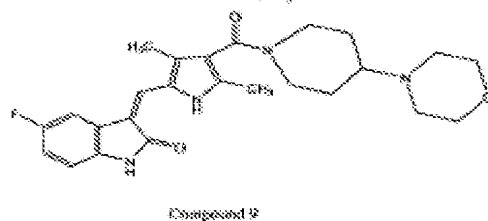
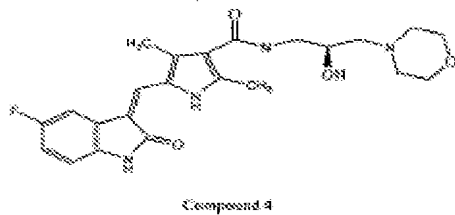
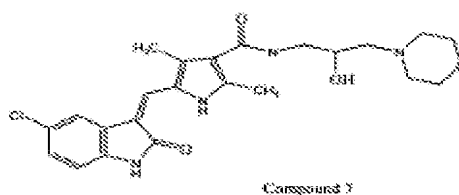
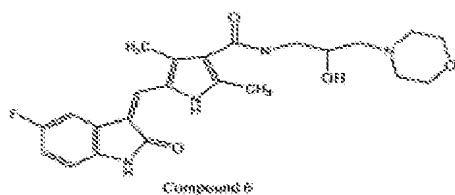
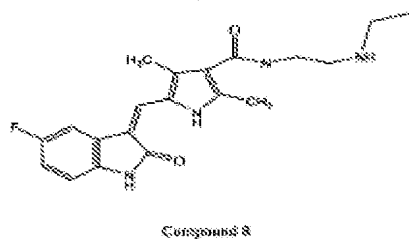
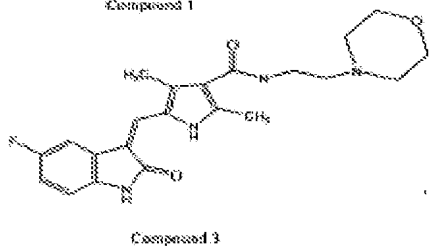
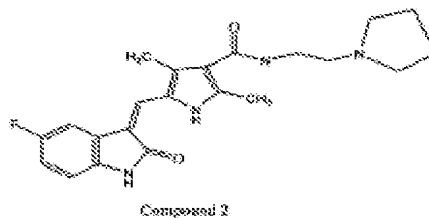
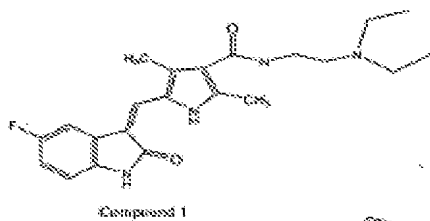
wherein each Y is CH₂, each n is 2, m is 0 and R₃ and R₄ form a morpholine ring.

39. (New) The method of claims 35, wherein R₂ is methyl, q is 2 and the methyls are bonded at the 3 and 5 positions.
40. (New) The method of claim 35, where in r is 0.
41. (New) The method of claim 40, wherein R₅ is H.
42. (New) The method of claim 40, wherein R₂ is methyl, q is 2 and the methyls are bonded at the 3 and 5 positions.

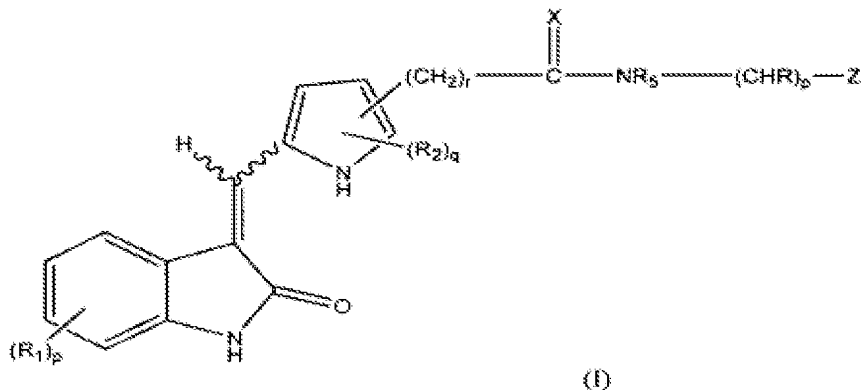
43. (New) The method of claim 35, wherein the compound administered is selected from the group consisting of:



44. (New) The method of claim 35, wherein the compound of Formula I is selected from the group consisting of:



45. (New) A method for treating excessive osteolysis in a patient having cancer that secretes M-CSF (Macrophage Colony Stimulating Factor), comprising administering to said patient an effective amount of a compound of Formula I:



wherein

R is independently H, OH, alkyl, aryl, cycloalkyl, heteroaryl, alkoxy, heterocyclic and amino;
each R_1 is independently selected from the group consisting of alkyl, halo, aryl, alkoxy, haloalkyl, haloalkoxy, cycloalkyl, heteroaryl, heterocyclic, hydroxy, $-C(O)-R_8$, $-NR_9R_{10}$, $-NR_9C(O)-R_{12}$ and $-C(O)NR_9R_{10}$;

each R_2 is independently selected from the group consisting of alkyl, aryl, heteroaryl, $-C(O)-R_8$ and SO_2R'' , where R'' is alkyl, aryl, heteroaryl, NR_9R_{10} or alkoxy;

each R_5 is independently selected from the group consisting of hydrogen, alkyl, aryl, haloalkyl, cycloalkyl, heteroaryl, heterocyclic, hydroxy, $-C(O)-R_8$ and $(CHR)_rR_{11}$;

X is O or S;

p is 0-3;

q is 0-2;

r is 0-3;

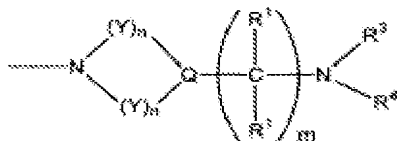
R_8 is selected from the group consisting of $-OH$, alkyl, aryl, heteroaryl, alkoxy, cycloalkyl and heterocyclic;

R_9 and R_{10} are independently selected from the group consisting of H, alkyl, aryl, aminoalkyl, heteroaryl, cycloalkyl and heterocyclic, or R_9 and R_{10} together with N may form a ring, where the ring atoms are selected from the group consisting of C, N, O and S;

R_{11} is selected from the group consisting of $-OH$, amino, monosubstituted amino, disubstituted amino, alkyl, aryl, heteroaryl, alkoxy, cycloalkyl and heterocyclic; R_{12} is selected from the group consisting of alkyl, aryl, heteroaryl, alkoxy, cycloalkyl and heterocyclic;

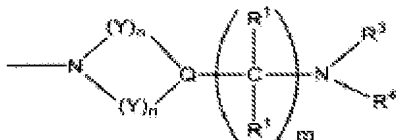
R_{12} is selected from the group consisting of alkyl, aryl, heteroaryl, alkoxy, cycloalkyl and heterocyclic;

Z is OH, O-alkyl, or $\text{-NR}_3\text{R}_4$, where R_3 and R_4 are independently selected from the group consisting of hydrogen, alkyl, aryl, heteroaryl, cycloalkyl, and heterocyclic, or R_3 and R_4 may combine with N to form a ring where the ring atoms are selected from the group consisting of CH_2 , N, O and S or



wherein Y is independently CH_2 , O, N or S,
Q is C or N;
n is independently 0-4; and
m is 0-3;
or a salt thereof.

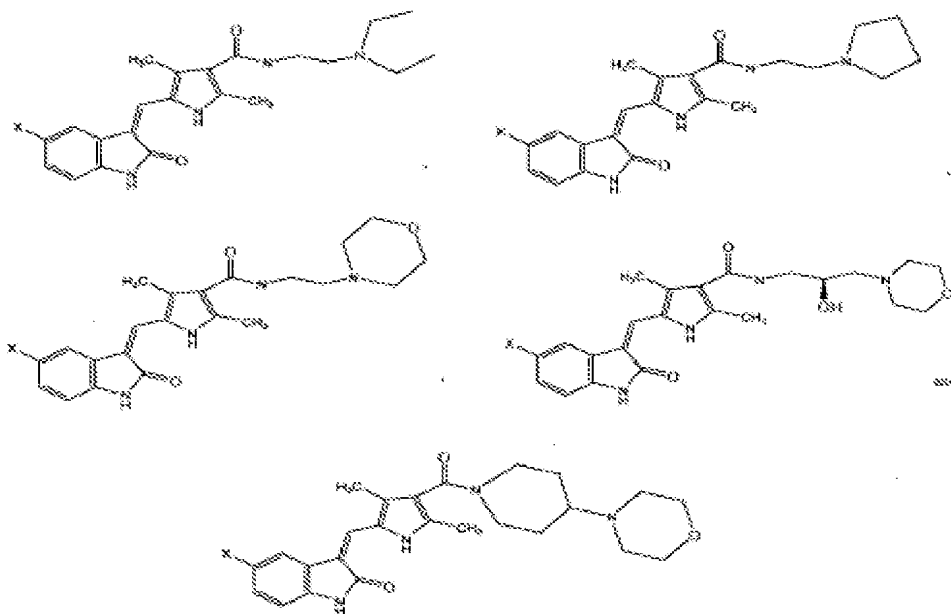
46. (New) The method of claim 45, wherein R_1 is halo and p is 1.
47. (New) The method of claim 46, where Z is $\text{-NR}_3\text{R}_4$, wherein R_3 and R_4 form a morpholine ring.
48. (New) The method of claim 45, wherein Z is:



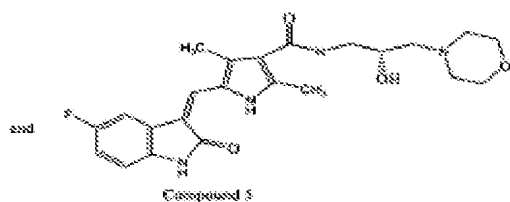
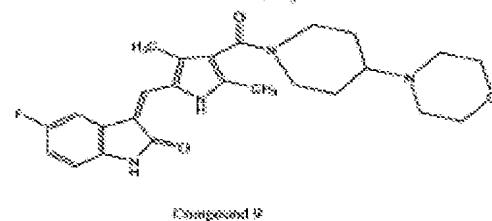
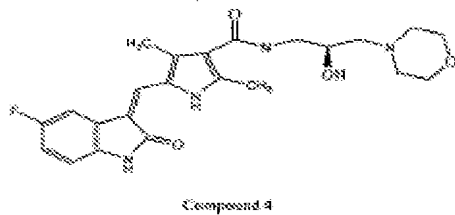
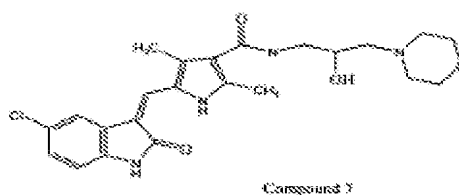
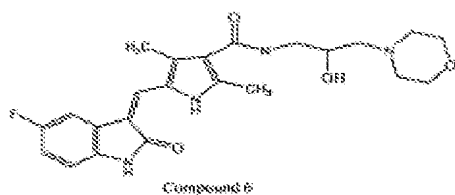
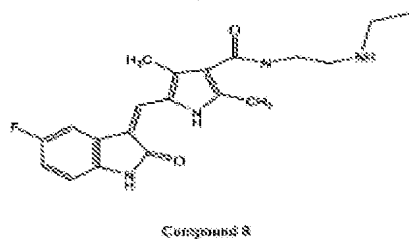
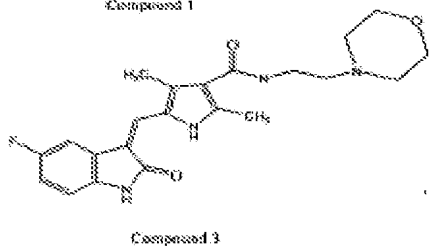
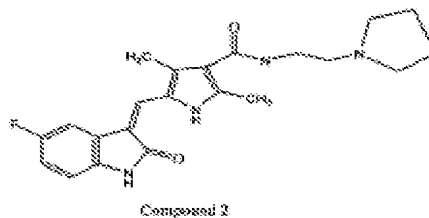
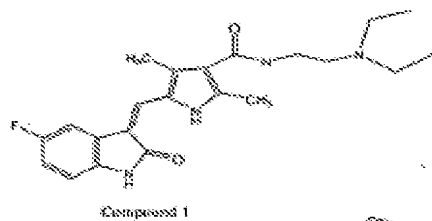
wherein each Y is CH_2 , each n is 2, m is 0 and R_3 and R_4 form a morpholine ring.

49. (New) The method of claim 45, wherein R_2 is methyl, q is 2 and the methyls are bonded at the 3 and 5 positions.
50. (New) The method of claim 45, where in r is 0.
51. (New) The method of claim 50, wherein R_5 is H.
52. (New) The method of claim 50, wherein R_2 is methyl, q is 2 and the methyls are bonded at the 3 and 5 positions.

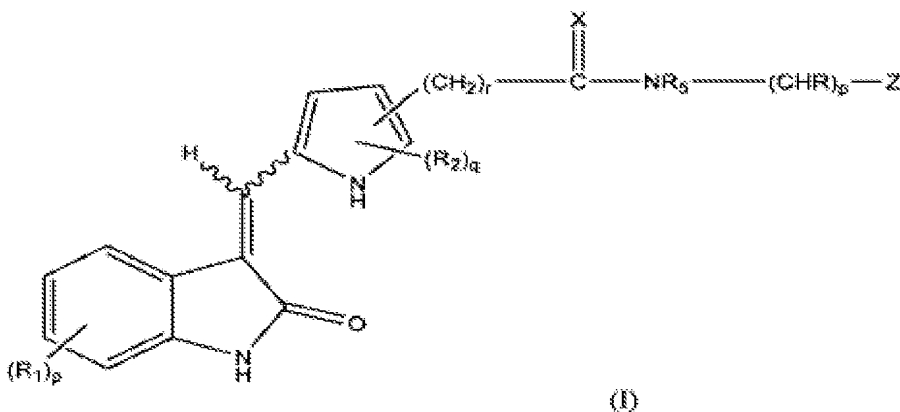
53. (New) The method of claim 45, wherein the compound administered is selected from the group consisting of:



54. (New) The method of claim 45, wherein the compound of Formula I is selected from the group consisting of:



55. (New) A method for treating excessive osteolysis in a patient that is post-menopausal, comprising administering to said patient an effective amount of a compound of Formula I:



wherein

R is independently H, OH, alkyl, aryl, cycloalkyl, heteroaryl, alkoxy, heterocyclic and amino;
 each R_1 is independently selected from the group consisting of alkyl, halo, aryl, alkoxy, haloalkyl, haloalkoxy, cycloalkyl, heteroaryl, heterocyclic, hydroxy, $-C(O)-R_8$, $-NR_9R_{10}$, $-NR_9C(O)-R_{12}$ and $-C(O)NR_9R_{10}$;

each R_2 is independently selected from the group consisting of alkyl, aryl, heteroaryl, $-C(O)-R_8$ and SO_2R'' , where R'' is alkyl, aryl, heteroaryl, NR_9N_{10} or alkoxy;

each R_5 is independently selected from the group consisting of hydrogen, alkyl, aryl, haloalkyl, cycloalkyl, heteroaryl, heterocyclic, hydroxy, $-C(O)-R_8$ and $(CHR)_rR_{11}$;

X is O or S;

p is 0-3;

q is 0-2;

r is 0-3;

R_8 is selected from the group consisting of $-OH$, alkyl, aryl, heteroaryl, alkoxy, cycloalkyl and heterocyclic;

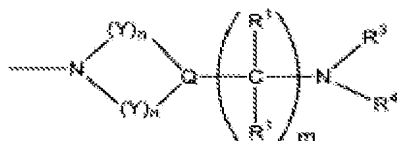
R_9 and R_{10} are independently selected from the group consisting of H, alkyl, aryl, aminoalkyl, heteroaryl, cycloalkyl and heterocyclic, or R_9 and R_{10} together with N may form a ring, where the ring atoms are selected from the group consisting of C, N, O and S;

R_{11} is selected from the group consisting of $-OH$, amino, monosubstituted amino, disubstituted amino, alkyl, aryl, heteroaryl, alkoxy, cycloalkyl and heterocyclic; R_{12} is selected from the group consisting of alkyl, aryl, heteroaryl, alkoxy, cycloalkyl and heterocyclic;

R_{12} is selected from the group consisting of alkyl, aryl, heteroaryl, alkoxy, cycloalkyl and heterocyclic;

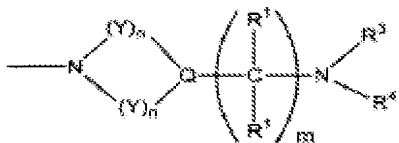
Z is OH, O-alkyl, or $-NR_3R_4$, where R_3 and R_4 are independently selected from the group consisting of hydrogen, alkyl, aryl, heteroaryl, cycloalkyl, and heterocyclic, or R_3 and R_4 may

combine with N to form a ring where the ring atoms are selected from the group consisting of CH₂, N, O and S or



wherein Y is independently CH₂, O, N or S,
Q is C or N;
n is independently 0-4; and
m is 0-3;
or a salt thereof.

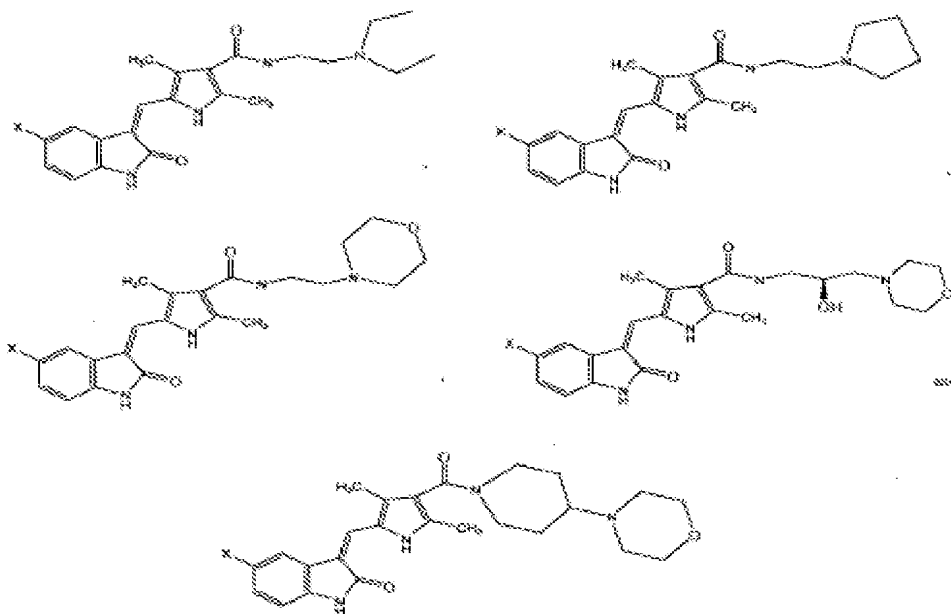
56. (New) The method of claim 55, wherein R₁ is halo and p is 1.
57. (New) The method of claim 56, where Z is -NR₃R₄, wherein R₃ and R₄ form a morpholine ring.
58. (New) The method of claim 55, wherein Z is:



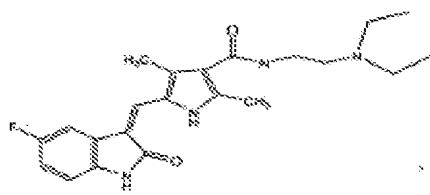
wherein each Y is CH₂, each n is 2, m is 0 and R₃ and R₄ form a morpholine ring.

59. (New) The method of claim 55, wherein R_2 is methyl, q is 2 and the methyls are bonded at the 3 and 5 positions.
60. (New) The method of claim 55, where in r is 0.
61. (New) The method of claim 60, wherein R_5 is H.
62. (New) The method of claim 60, wherein R_2 is methyl, q is 2 and the methyls are bonded at the 3 and 5 positions.

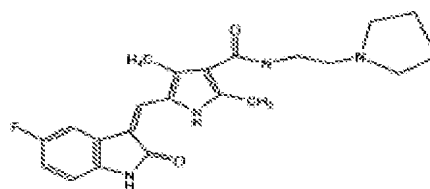
63. (New) The method of claim 55, wherein the compound administered is selected from the group consisting of:



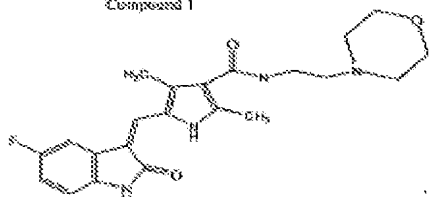
64. (New) The method of claim 55, wherein the compound of Formula I is selected from the group consisting of:



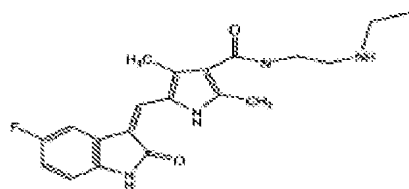
Compound 1



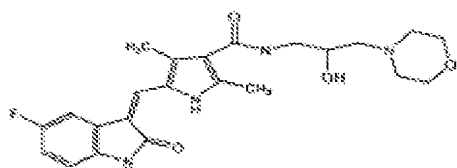
Compound 2



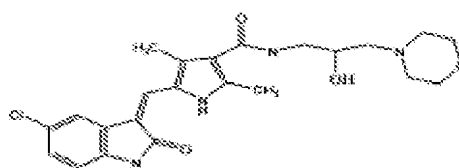
Compound 3



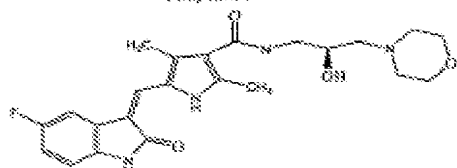
Compound 4



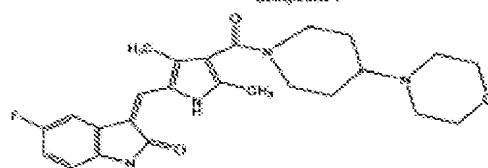
Compound 5



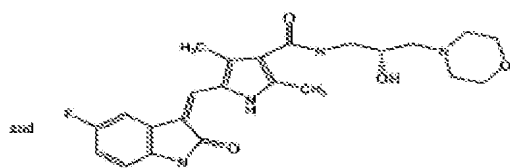
Compound 6



Compound 7



Compound 8



Compound 9